

Amendments to the Drawings:

The attached additional original drawing sheet adds Figs. 7a-7c.

Attachment: Additional Sheet

REMARKS

Claims 1-2, 5-10, 13 and 14 are pending in this application. The Office Action objects to the drawings; rejects claims 2, 5-10, 13 and 14 under 35 U.S.C. §112, second paragraph; and rejects claims 1, 2, 5-10, 13 and 14 under 35 U.S.C. §103(a). Applicants amend the specification, amend instant claim 2 and add Figs. 7a-7c. Support for new Figs. 7a-7c and the amendments can be found in the specification at, for example, paragraphs [0012], [0013], [0048], [0052], [0055], [0070] and Figs. 1 and 2.

Applicants appreciate the courtesies extended by Examiner Shay during the personal interview conducted on June 15, 2007 with Applicants' representative. Applicants' separate record of the substance of the interview is contained in the following remarks.

I. Drawings

The Office Action objects to the drawings under 37 C.F.R. §1.83 for not reciting every feature of the invention. The Office Action asserts that "the laser beam with 1-100 mJ/cm² of energy density energy output," "quartz glass chip" and "introducing foreign matter" must be shown, or the features canceled from the claims. Applicants add new Figs. 7a-7c and respectfully traverse the objection.

As was required during the personal interview conducted with Examiner Shay on June 15, 2007, new Fig. 7a illustrates a laser with "1-100 mJ/cm²" energy density. Further, new Figs. 7a-7c clearly illustrate the structure of the quartz glass chip. Additionally, as agreed during the June 15 personal interview, explicit illustration of the introduction of foreign matter is not required. That is, once a hole is bored through the cell wall or cell membrane, it is inherent that foreign matter such as an organelle (i.e., a nucleus or chromosome) can be introduced into the cell. See specification at paragraphs [0051]-[0056].

For at least the foregoing reasons and introduction of new Figs. 7a-7c, the drawings depict every necessary claimed feature. Reconsideration and withdrawal of the objection are earnestly solicited.

II. Rejection under 35 U.S.C. §112, second paragraph

The Office Action rejects claims 2, 5-10, 13 and 14 under 35 U.S.C. §112, second paragraph. The Office Action asserts that claims 2, 5-10, 13 and 14 fail to further limit the claim from which they respectively depend. Applicants amend instant claim 2 and respectfully traverse the rejection.

Instant claim 2, as amended, recites "the method set forth in claim 1, wherein irradiating the living the cell or the living tissue occurs with a laser beam at a wavelength of 500 nm or less." Thus, instant claim 2 recites the method set forth in claim 1, wherein irradiating occurs with a laser beam having specifically a wavelength of 500 nm or less. Instant amended claim 2 thus clearly limits the method recited in claim 1. As agreed with Examiner Shay during the June 15 personal interview, each of dependent claims 5-10, 13 and 14 similarly further limit the respective claims from which they depend.

For at least the foregoing reasons, claims 2, 5-10, 13 and 14 are not indefinite. Reconsideration and withdrawal of the rejection are earnestly solicited.

III. Rejections under 35 U.S.C. §103(a)

The Office Action rejects claims 1-2, 5-10, 13 and 14 under 35 U.S.C. §103(a) as unpatentable over Abela in combination with Matsuura, Kubota and Lewis. The Office Action asserts that Kubota teaches that producing holes in cell walls can be done using energy densities between 1-100 J/cm². Applicants respectfully traverse the rejection.

Instant claim 1 recites "with a laser beam with 1-100 mJ/cm² of energy density output." This claimed range is particularly advantageous in that if the density of the energy is less than 1 mJ/cm², the cell wall cannot be sufficiently processed, whereas if it is more than

100 mJ/cm², the laser penetrates the cell membrane and largely damages the cell. See, for example, paragraph [0048] of the specification.

In contrast, as discussed with Examiner Shay in the personal interview conducted on June 15, 2007, nowhere does Kubota disclose such a range. Rather, Kubota discloses an energy density value of 2.54 J/cm², which would damage the cell membrane. See Kubota at col. 5, lines 6-17, and paragraph [0048] of the specification. It would thus not have been obvious to look to Kubota for a laser having an energy density of 1-100 mJ/cm² because Kubota does not disclose such a range, nor does Kubota discuss its attendant advantages. Rather, Kubota discloses a range that would render the instant method inoperable due to damage to the cell membrane. Moreover, none of Abela, Lewis or Matsuura are cited for this feature, nor do they remedy Kubota's deficiencies.

For at least the foregoing reasons, instant claims 1-2, 5-10, 13 and 14 would not have been obvious over Abela in combination with Matsuura, Kubota and Lewis. Reconsideration and withdrawal of the rejection are earnestly solicited.

IV. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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JAO:RCC/amw

Attachment:

Additional Sheet - Figs. 7a-7c

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